



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/770,322	01/26/2001	Ronald E. Huffman	12373.16US01	7517

23552 7590 09/25/2002

MERCHANT & GOULD PC
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903

EXAMINER

LEWIS, RALPH A

ART UNIT PAPER NUMBER

3732

DATE MAILED: 09/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/770,322

Applicant(s)
Huffman

Examiner
Ralph Lewis

Art Unit
3732



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 47-50 is/are allowed.
- 6) ☒ Claim(s) 1-34, 36-46, and 51-55 is/are rejected.
- 7) ☒ Claim(s) 35 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other:

Art Unit: 3732

Objection to the Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “cover” of claims 41 and 42 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Objection to the Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). The specification provides no apparent basis for the “cover” of claims 41 and 42.

Rejections based on 35 U.S.C. 112, first paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 41 and 42 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification provides no apparent basis for the “cover” of claims 41 and 42.

Art Unit: 3732

Rejections based on Prior Art

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 10-13, 15, 16, 20-22, 26-28, 36, 37 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Dew (3,436,827).

Dew discloses a stone member 40 having a shape that corresponds to a patient's gum line, an encasement member 30 defining a cavity in which the stone member is cast (note column 3, lines 52-72). And structure 56 that fixedly retains the stone member 40 within the cavity of the encasement member 30. In regard to claim 2, note concave socket 45 and latch receiver 50. In regard to claim 3, note ball 54 at bottom end of Figure 3 and latch receiver 50 at top end of Figure 3. In regard to claim 10 note projection 56. In regard to claim 12, note recess 77. In regard to claim 13, note support surface 12 and perpendicular wall 34.

Claims 1, 2, 4, 13-15, 20, 21, 23-29, 39, 43 and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Darnand (5,100,317).

Art Unit: 3732

Darnand discloses a stone member 13, 14 corresponding to a portion of a patient's gum line, an encasement member 3 and structure 4, 12 that fixedly retains the stone member within the cavity. In regard to claim 2, note socket 4 and latch 12.

Claims 45 and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Huffman (4,378,929).

Note figures 10 and 11 where encasement member 80 is filled with uncured casting material and cast dental model 94 having pins 96 is placed adjacent thereto and cured such that the pins extend into the uncured material

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 38, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dew (3,436,827).

In regard to claim 38, Dew discloses that the device is made of a transparent synthetic resin - "a variety of such synthetic resin materials will become apparent to those skilled in the art

Art Unit: 3732

of materials” (column 5, lines 73-75), but does not disclose the specifically claimed “polycarbonate.” To have merely selected the well known conventional resin material “polycarbonate” as the resin material of Dew would have been obvious to one of ordinary skill in the art. In regard to claims 41 and 42, the use of a cover for the Dew device would have been obvious to one of ordinary skill in the art.

Claims 4-9, 13-20, 24, 25, 27-34, 36, 37, 39, 40, 43 and 51-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dew (3,436,827) in view of Huffman (4,842,242).

Dew does not disclose the use of the stone model 40 with an articulator. Huffman teaches that it is desirable to attach encased stone models (Figure 9) to an articulator by providing for a slot 106 in the encasement member 102 to which an articulator is attached. To have provided a slot in wall member 24 to which an articulator may be attached as taught by Huffman would have been obvious to one of ordinary skill in the art.

In regard to claims 4 and 39, note the attachment plate flat surface of element 22 (Huffman) which is attached to the encasement member. Providing for such an attachment in Dew would have been obvious to one of ordinary skill in the art. In regard to claims 5 and 40, note the ball and socket attachment at 22 of Huffman. Providing for such an attachment in Dew would have been obvious to one of ordinary skill in the art. In regard to claim 6, element 22 can be considered part of the “encasement member.” In regard to claims 13 and 27, to the extent that Dew does not disclose the “cavity generally corresponding to the curvature of a gum” limitation,

Art Unit: 3732

Huffman teaches that it is desirable to curve the encasement member to correspond to the curvature of the teeth and gums. To have curved the encasement member 30 of Dew correspond to the curvature of the teeth and gums as taught by Huffman would have been obvious to one of ordinary skill in the art.

Allowable Subject Matter

Claims 47-50 are allowed. Claim 35 is objected to as be dependent on a rejected base claim, but would be allowable if rewritten in independent form to include all of the limitations of the claims from which it depends.

Prior Art


Applicant's information disclosure statement of June 20, 2001 has been considered and an initialed copy enclosed herewith. It is noted that many of the cited references have little or no reasonable relation to the claimed invention (e.g. British Patent 886,118 directed to wall plugs). Applicant is encouraged to only cite prior art that is reasonably material to the patentability of the claimed subject matter.

Kuhn (3,495,333), Marshall et al (3,702,027), Jinoian et al (4,957,435), Michael (5,306,145), Callne (5,506,096), Micheal (5,996,963), and Browne et al (6,099,305) are made of record.

Art Unit: 3732

Any inquiry concerning this communication should be directed to Ralph Lewis at telephone number (703) 308-0770. Fax (703) 872-9302. The examiner works a compressed work schedule and is unavailable every other Friday.

R.Lewis
September 20, 2002



Ralph A. Lewis
Primary Examiner
Au3732